

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/723,624	11/26/2003	Charles J. Koehler	65858-0029	1146	
10291 7	10291 7590 03/10/2006			EXAMINER	
•	HMAN & GRAUER	BARBEE, MANUEL L			
SUITE 140	WARD AVENUE		ART UNIT	PAPER NUMBER	
BLOOMFIELD HILLS, MI 48304-0610			2857		

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



Supplemental

Application No.		Applicant(s)		
	10/723,624	KOEHLER ET AL.		
	Examiner	Art Unit		
	Manuel L. Barbee	2857		

All discounting the second	10/723,624	KOEHLER ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Manuel L. Barbee	2857	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI- of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comm GHTS. This application is and MPEP 1308.	n this application. If not included unication will be mailed in due cours	se. THIS he initiative
1. This communication is responsive to papers filed 14 Novem	<u>nber 2005</u> .		
2. The allowed claim(s) is/are 1-63 and 84-120.			
 3. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 		or (f).	
2. Certified copies of the priority documents have	been received in Applicati	on No	
3. Copies of the certified copies of the priority doc	cuments have been receive	ed in this national stage application fr	rom the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requiren	nents
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			E OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the header according to 37 C	the drawings in the front (not the back FR 1.121(d).) of
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I	sit of BIOLOGICAL MAT FOR THE DEPOSIT OF BI	ERIAL must be submitted. Note t OLOGICAL MATERIAL.	he
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	-	nformal Patent Application (PTO-152	2)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		Summary (PTO-413), ./Mail Date	
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date		s Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material		s Statement of Reasons for Allowand	e
	9. 🗌 Other		

Page 2

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ken Jarrell on 23 February 2006.

The application has been amended as follows:

In claim 21, delete the ";" at the end of the claim and insert --.--.

In claim 35, delete the ";" at the end of the claim and insert --.--.

Allowable Subject Matter

- 2. Claims 1-63 and 84-120 are allowed.
- 3. The following is an examiner's statement of reasons for allowance: Bauer et al. do not teach a method that includes disposing an electrode mechanism in a substance, exciting the electrode mechanism sequentially with a specified number of alternating voltages, wherein each of the alternating voltages is at a different frequency in a range of frequencies, performing at least one calculation to generate at least one datum associated with each of the frequencies in the range of frequencies, creating a graph comprising x-values related to the specified number and creating a combined plot by placing a plurality of plots generated from a plurality of spectra on the graph using each at least one datum, wherein each x-value corresponds to at most one datum in the combined plot, as shown in claim 1. None of the prior art teaches a system or method

that includes an electrode mechanism that is operational when disposed in a substance, a mechanism for exciting the electrode mechanism sequentially with a specified number of alternating voltages, a computing device for performing at least one calculation to generate at least one datum associated with each of a plurality of frequencies in a range of frequencies and at least one prediction equation that is generated at least in part by using the at least one datum, as shown in claims 14, 30 and 44. None of the prior art teaches a method that includes generating a plurality of first plots of spectra over a range of frequencies, generating a plurality of second plots of the range of frequencies and creating a first spectral matrix from the plurality of first plots and a second spectral matrix from the plurality of second plots, as shown in claim 84. None of the prior art teaches a method that includes generating a plurality of Nyquist plots, wherein each Nyquist plot is associated with a sample of a substance, creating a derived data by deriving at least one datum from each of the Nyquist plots and populating a spectral matrix with the derived data, as shown in claim 108.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 571-272-2212. The examiner can normally be reached on Monday-Friday from 9-5:30.

Art Unit: 2857

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mlb February 23, 2006

> MARC S. HOFF BUPERVISORY PATE: E MAINER TECHNOLOGY CENTER 2800